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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/747,835	12/29/2003	Roel Domingo Villanueva	GYTR / 18	6184

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EXAMINER	
KNABLE, GEOFFREY L	
ART UNIT	**PAPER NUMBER**
1733	

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/747,835	VILLANUEVA ET AL.	
	Examiner	Art Unit	
	Geoffrey L. Knable	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 November 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-8,13,14 and 16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-8,13,14 and 16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Applicant's election **without** traverse of species I in the reply filed on 11-18-2005 is acknowledged.

2. Claims 1, 3-8, 13, 14 and 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 1, line 8 has been amended to define that the spiral wound belt layers extend "axially into said shoulder" - it however is not seen that the original disclosure describes the lateral extent of these layers in this manner and thus this is considered to be subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, i.e. it is considered to be new matter. The only original description of the lateral extent of these layers appears to be that it "extends between the tire shoulders 18" (page 6, lines 15-18). This seems distinct from the now claimed "into" the shoulders (especially as applicant is asserting that the locations of these layers relative to the "shoulders" represents a main distinguishing feature of the invention).

The reference in claim 13 to the extent of the spiral belt layer as being from locations "proximate" the shoulders is likewise not considered to be described in the specification in such a way as to reasonably convey to one skilled in the relevant art that

the inventor(s), at the time the application was filed, had possession of the claimed invention, i.e. it is likewise considered to be new matter.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 3-5, 8, 13, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oare et al. (US 5,115,853) taken in view of Damke et al. (US 5,795,417 - newly applied) and Maathuis et al. (US 5,007,974).

Oare et al. is applied for substantially the same reasons as set forth in the last office action. Claim 1 has been amended to define that the cut and spiral belt layers extend into the shoulder; claim 13 is amended in similar fashion. Oare et al. does not describe or specify any particular relationship of the belt and overlay layers to the tire shoulders, it being considered that especially in view of the lack of any specifics in this regard (and the somewhat schematic drawings - note the lack of detail of e.g. the tread pattern as well as what would seem to be a clear exaggeration of the relative location of the overlay layers to the tread surface), the ordinary artisan would have found it obvious to provide the belt and overlay structures in typical locations relative to the tire tread/shoulder for only the expected results. Further, it is submitted that the ordinary artisan would have readily appreciated that tire belts typically extend to what would commonly be termed a tire shoulder, the overlay covering these belts - Damke et al. is cited as merely exemplary of the understanding that a tire overlay typically extends and covers the "shoulder regions" of a tire - e.g. col. 4, lines 4-12; note also esp. col. 5, 15-21 of Damke et al. which indicates that:

> As already described, a high modulus of elasticity is necessary in the edge regions of the breaker plies, which correspond to the shoulder regions of the tire, in order to counteract the particularly large danger of separation of the breaker plies here, whereas in the central axial region of the tire a smaller modulus of elasticity of the cover ply is sufficient.

Given this understanding that the edge regions of a tire belt/breaker correspond to the shoulder regions of a tire, it is submitted that it would have been obvious to provide a belt following the Oare et al. teachings, where the belt edge extends into what would normally be considered a shoulder region of a tire.

As to the spirally wound layers having a pitch greater than or equal to the strip width, as already noted, Oare et al. suggests that the central belt region can have abutting turns. Applicant has argued essentially that the claims as amended also require that this pitch be maintained for the entire belt width (except the shoulders) and that Oare et al. only suggest abutting in the central region and therefore does not suggest this. However, it should first be noted that it is not clear that the present claim language excludes the spiral layers including other pitches within the layer, this being especially apparent in light of the fact that the shoulder layers are described as "characterized by a second winding pitch of less than one strip width" but nevertheless, these layers also include windings (e.g. 48, 50, 52, 54) that are at a pitch equal to one strip width. If the claims are read consistent with the described embodiments, then the only reasonable reading of the characterizing clauses in the claim with respect to winding pitch are that they are defining a pitch that must be present but that is not necessarily the exclusive pitch present for this layer. Further, and in any event, it is also noted that there is also no clear indication that the abutting would not extend to connect

with the overlapped axially outer regions, it being stressed that col. 3, lines 9-12 suggest that the gradual change is only an optional ("if desired") feature. Note also that even the exemplary overlaps in regions "B" and "C" are both inclusive of 0% overlap.

Maathuis et al. has been added to the rejection of amended claims 1/13 for the same reasons previously applied against claim 15.

5. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oare et al. (US 5,115,853) taken in view of Damke et al. (US 5,795,417 - newly applied) and Maathuis et al. (US 5,007,974) as applied above, and further in view of at least one of [Takatsu et al. (US 5,277,236) and Assaad et al. (US 5,385,190)] as applied in the last office action.

Note also that Maathuis et al. is applied against claim 7 for the same reasons as set forth in the last office action (it is now included within the same rejection as claim 6 since Maathuis et al. is now applied against claim 1).

6. Applicant's arguments filed 11-18-2005 have been fully considered but they are not persuasive.

The arguments with respect to the prior 35 USC 112, second paragraph rejections, however, are convincing and these rejections have been withdrawn.

As to the prior art rejections, it is argued that the lateral edges of the cut and spiral layers in Oare et al. "clearly terminate short of the shoulder". This argument has been considered but is unpersuasive mostly for the reasons noted within the statement of rejection above. Additionally, it is also not considered entirely clear that these layers terminate short of the shoulder, even in the depiction of the reference. In particular, the

location and especially the boundaries of what one terms the "shoulder" in a tire would seem to be susceptible to various interpretations, it not being clear that applicant has provided sufficient detail in the present specification upon which to base a conclusion that the shoulder region as claimed should be read to have a very narrowly defined meaning and well characterized boundaries that are defined in such a manner that the claim would not suggest such a location. Further, and most importantly, it is again noted and emphasized that there is no suggestion in Oare et al. that the depicted cross-section is intended to present an actual to-scale drawing of a tire rather that just a general or schematic depiction of the desired relationships, it being noted that there are no tread grooves illustrated and it would seem clear that the belt/overlay depictions would not actually be true to scale (e.g. the overlay would likely not include spaces between layers or come so close the tread surface). As such, again, it is submitted that the artisan would not have read these depictions as suggesting that the belt/overlay edges be placed other than at typical locations, the newly applied prior art evidencing that such locations typically correspond to shoulder regions of the tire.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
February 4, 2006